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N. E. FARMER.

The English Agricultural journals for the last few years, have contained many articles upon the practice of subsoil ploughing. Our readers, we suppose, understand this to be the use of a plough having a narrow *double share*, or a small share on each side of the coulter and no mould-board. It is used in each furrow after the common plough, and breaks up and stirs the sub-soil to the depth of several inches, without bringing it up and incorporating it with the soil. Many farmers in England have derived great advantages from this process, in connection with under-draining. Others have found it waste labor. The January No. of the Journal of the Royal Agricultural Society of England contains a communication upon this subject by H. S. Thompson, Esq., parts of which we extract below.

Heretofore we have received the impression that our transatlantic co-workers deemed this process peculiarly suited to stiff and heavy soils, consisting mostly of compact, adhesive clays. They now begin to intimate that shallow soils of the lighter kinds may be quite as susceptible of improvement under this process as any others. We have often conjectured that it must be thus; and have supposed that many of our shallow, gravelly and sandy soils in New England would be rendered more retentive of moisture and more fertile by simply subsoiling without under-draining. Some of the observed facts, leading to the supposition are, that we have seen apple trees growing better in gravel that had been moved, than in the deepest and richest mould; that grass, on a narrow strip where the subsoil had been thrown out and replaced when putting down the logs of an aqueduct, was much more abundant than on the adjoining portions of the field; that an immense—a *mammoth* squash had grown upon an unmanured gravel heap that had been formed when digging a well. The loosening of the sub-soil, making it more pervious to air and water—bringing many particles into contact with particles that have not touched them before, and thus perhaps promoting slight fermentations and new chemical combinations, may fit the sub-soil to attract, receive and nourish the roots of plants. Can our practical men give us any useful facts or observations upon this subject? The matter is worthy of attention.

ON SUBSOIL PLOUGHING.

BY H. S. THOMPSON, ESQ.

Public opinion is still much divided on the subject of subsoil ploughing. Some very eminent farmers maintain that it is lost labor; while others, equally eminent, think no system of husbandry complete without it. When men of sense and experience differ respecting matters of fact which have come under their own observation, it will generally be found that, like the travellers disputing about the color of a chameleon, neither would be wrong if he would only allow his opponent to be right. To take a case in point:—one farmer of my acquaintance, drained deep and used the subsoil plough with every precaution and care, yet found it fail; another, following precisely the same plan, permanently improved the texture of the soil: both were anxious that their friends should profit by either the example or the warning, and lost no opportunity of making the result public. For want of a better term, both experiments were said to have been made on *stiff* soils: both are credible men; and the natural result of such conflicting testimonies is, that the question remains undecided. Here we feel the want of some acknowledged classification of soils, founded on chemical analysis. No two witnesses could be more directly at issue than those alluded to above: and very possibly, both one and the other may have been quoted by the supporters or opposers of the subsoil plough as triumphantly establishing their position. The moment, however, that the two experiments are referred to their place in the geological map, the whole difficulty vanishes. One was made in a stiff, marly clay, on the new red sandstone formation; the other on that most tenacious of all soils, the lias clay: the one was permanently improved; the other ran together again almost as soon as done.

It would be but waste of time to give any additional proof of what has already been fully established, viz: that on some soils the subsoil plough has been eminently useful; that on others it has signally failed. The grand desideratum, at present, is the discovery of some test which shall enable us, on the examination of any given soil, to pronounce tolerably confidently that it would be advisable or useless to subsoil it. I feel fully persuaded that the per centage of alumina, or pure clay, in any soil, furnishes the required criterion. In the two instances quoted above, I procured an analysis of the soils, and found that, in the one on which subsoiling was of no use, the proportion of alumina was twice as great as in the other: this most unexpected result first suggested the rule above stated; and in all the cases which I have since had an opportunity of examining, it has been fully confirmed. A rule of this kind can only be established by numerous experiments on various soils; but if those gentlemen who are anxious to promote agricultural improvement, would kindly forward to the secretary of the Yorkshire Agricultural Society the result of their own experiments with the subsoil plough, accompanied by either an analysis of the subsoil on which it was tried, or even a specimen of the subsoil for analysis, the question of subsoil ploughing would very soon be set at rest; and it would be as easy to point out the soils which would be benefited by it, as it is now to distinguish turnip and barley soils from those adapted for wheat and beans.

I will now state the steps taken to test the truth of the rule above mentioned, viz: that the per centage of alumina ought to guide us in the selection of soils for subsoiling. I wrote to several gentlemen whom I knew to have used the subsoil plough, and on whose accuracy I could rely, and begged that they would furnish me with some account of their experiments, and send me a specimen of the subsoil for analysis. I have, wherever practicable, given the account in the words of the writer; and can only regret that the shortness of the time has prevented my collecting more evidence on the subject. The following essay was sent me by that very intelligent farmer, Mr Black, land-agent to the Earl of Zetland, at Marske, in Cleveland.

"There is probably no agricultural operation that has been so strongly recommended by some, and so much censured by others, as subsoil ploughing. Its advocates have represented it as the great panacea for all soils and situations; and its introduction, they say, will form a new epoch in agriculture. Believing that neither party have viewed the subject properly in all its bearings, I beg leave humbly to offer a few remarks, first, on the soil that will receive the most permanent improvement from subsoil ploughing; and, second, where it can be of no utility. The soil that I believe will receive the most permanent improvement from subsoil ploughing is one in which silica predominates; indeed all shallow soils, of the lighter kinds, will be improved by it; and particularly so if there is any moorland pan, or indurated incrustations, formed by the weight of the plough going for a number of years at the same depth, or from other causes. If the subsoil is of good quality, and a greater depth of furrow is wished for, the subsoil plough may be used with advantage; the percolation of water prepares the subsoil for amalgamation with the surface. Strong clayey land cannot be permanently improved by subsoil ploughing. Alumina is a tenacious, compact, adhesive substance; its parts are in minute divisions, and have great affinity for each other. In September, 1838, I subsoiled two fields of 10 acres each, which had been previously drained, and as the *nomenclature* of soils is not at all intelligible, and has led to much mischief in detailing experiments, I send you the analysis of 300 grains of the field since ploughed.

300 grains consisted of—

	Grains.
Moisture,	61
Soluble matter, principally vegetable,	3
Lime, in the state of carbonate,	2
Peroxide of iron,	50
Alumina,	130
Silica, or fine land,	20
Vegetable matter,	33
Loss,	1
	300

"One of these subsoiled fields produced 35, and the other 27 1-2 bushels of wheat per acre; the field that produced the greatest number of quarters per acre was subsoiled across the drains; the other parallel with them. I do not attribute this great falling off per acre altogether to the parallel subsoiling, although I think the other is decidedly the best method. In December, 1839, one of the fields was ploughed, but no traces remained of the subsoil plough having been used. I expected, from the complete breaking up of the subsoil, that the parts would have remained distinct for years; but

such was not the case: they had all run together, and were as compact as when first moved by the plough, without even the appearance of water-shake or fissure. This I was not prepared to expect. Separated by a fence only is another field of a similar description, which was fallow at the same time, but not subsoiled; the crop on this field was quite equal to the other. A neighbor subsoiled one acre of a field which was sown with beans; this field I frequently saw through the summer, and during that period the part subsoiled was by no means superior to the other."

On reading this account my attention was naturally arrested by the great difference between the produce of the two fields subsoiled by Mr Black; and as it was important to ascertain whether any sufficient cause could be assigned independent of the different methods adopted in subsoil-ploughing them, I addressed him the following questions:—Is the field which produced 35 bushels per acre of better quality than the one which produced 27 1-2; or was it better manured, or the seed time more favorable? His answer was as follows:—"The land (viz., that which produced 35 bushels) is much inferior. I ascribe the superior crop to the field having been more recently drained than the other. I have always found the first crop after draining above an average. Lime, too, was applied to this field two years before, which did not appear to have acted until the water was taken off: and last, although not least, it was subsoiled across the drains. As regards manure, I consider the fields alike in that respect. Both fields were sown under favorable circumstances." Draining after lime appears quite adequate to account for this increased produce; but even should we attribute a portion of it to subsoiling across instead of parallel to the drains, the whole effect seems to have vanished before the next ploughing, as we read in Mr Black's account. In confirmation of Mr Black's views, I will quote the opinion of Mr Vansittart, of Kirkleatham, whose experiments I had an opportunity of observing whilst in progress. I need hardly add that they were made in the most judicious and effectual manner. "Upon subsoiling I have nearly made up my mind, and am satisfied that it is not of permanent use on this soil." We have here the experience of Mr Vansittart, Mr Black, and a neighboring farmer, all of whom agree in thinking that subsoiling is of no use on their land. The quality of land is the same in all: consisting of a level and uniform tract of that peculiarly tenacious soil, the lias clay, containing, as we see by the analysis furnished by Mr Black (made at Edinburg,) no less than 43 per cent. of alumina or pure clay. The next evidence I shall adduce is that of Mr Stevenson, of Rainton, near Boroughbridge, a very enterprising and judicious tenant-farmer; whose farm chiefly consists of a stiff red clay, on the red sandstone formation. He began by subsoiling 17 acres in the winter of 1835-6: the summer following, these 17 acres grew a remarkable crop of turnips, though the year was in general a failing one for that crop. The turnips were followed by barley, seeds, wheat—all good crops. When ploughed deep again for turnips, at the end of the course, it was found to work much lighter than the land not subsoiled. The man who held the plough in both instances found a great difference in the mellowness of the soil turned up, and consequently in the labor of the horses. The subsoil, on analysis, showed 24 per cent. of alumina. The exact analysis is as follows:

Specific gravity, 2.070.

100 parts contain—

Of water of absorption,	7
Silica,	55
Alumina,	24
Oxide iron,	7 1-2
Soluble matter,	2
Loss,	4 1-2
	100

Mr Stevenson found so much benefit from the operation, that he has since subsoiled 27 acres, and means to continue it on a large scale. A glance at the experiments above described enables us to make a first approximation to the solution of this much debated question. It appears probable that a soil containing not more than 24 per cent. of alumina may be subsoiled with advantage, but that when it exceeds 40 per cent. no permanent improvement is derived from the operation. Many more experiments must be made before this approximation can be so modified as to make it of general application: and I would beg to suggest to those gentlemen who may feel disposed to assist in the inquiry, that any account of the use of the subsoil-plough on land containing more than 24 and less that 40 per cent. of alumina would be particularly valuable, as the first point to ascertain is, the maximum quantity of alumina which may exist in land without making it unfit for subsoiling. From what has been stated above, there is reaaon to suppose that this maximum point lies between 24 and 43 per cent.; every experiment, therefore, made on soil containing more than the one and less than the other, reduces the doubtful soils within narrower limits. It would also be advisable to try the effect of subsoiling on two soils containing equal quantities of alumnia, but otherwise differing in the composition, as it is possible that other substances, in combination with alumnia, may in some degree affect the result.

I have thus far confined myself to stiff soils; but as the subsoil-plough has been little used on light land, and its effect therefore is little known, the following paper from Mr Denison, of Kilnwick Percy, will be read with great interest.

[Mr Denison's operations were made on a field consisting of sandy hills, light, blow-away soil, and marshy hollows—peaty soils. After having described the drainage and its expense, he says:]

"The first process after the drains were complete was in the months of March and April to pare and burn; and to sow rape and turnips drilled with half-inch bones and soot in the following month. The crop was not at all regular; being good where the soil was deep and black, but very bad where it was sandy: the sole being hard and the action of the sun having great power to the very roots of the plants.

"In the winter of the same year, after the turnips and rape were consumed, I ploughed land in the direction of the old furrows, and the subsoil plough followed, worked by two oxen and four horses; loosening the hard sandy sole on the higher ground, and tearing up the roots of the rushes, &c., on the low. In this state the land lay till the month of April following, when Finlayson's drag-harrow was applied across the ploughings, which brought up all the roots and rubbish to the surface; these were then raked off and burnt. I then sowed the black Tartarian oats, and ploughed them in; the ground was then harrowed and pressed down with a clod-crushing roller, made by Mr Croskill, of Beverley, which implement has been of the greatest service to me in almost every stage and crop. It has been the means of consolidating the earth, which would otherwise have been too light, and it has kept the moisture in also. It has a decided advantage over every other kind of roller in this respect, because it leaves an uneven surface instead of a flat one, from which the rain, in sandy land especially, is apt to run off without nourishing or refreshing the crop.

"The oats came out very healthy and had no check: in sixteen weeks from the time of sowing they were reaped, and when thrashed yielded 10 1-2 quarters per acre, which were sold at 26*s.* per quarter, and this from land that was let two years before at 2*s.* 6*d.* per acre.

"I calculate the expense of subsoil ploughing, according to my mode of using it, at 26*s.* per acre, thus:

Four horses and two men, per day,	14*s.*
Two beasts and one man,	5*s.*
	19*s.*

These will do 3 roods per day. The oxen are yoked to the plough, and the four horses precede. I sowed 40 acres with oats, of the same flat of land that had been pared and burnt, but not subsoiled, from want of time. The produce of this was not more than 3 qrs. per acre, and straw small and short; a very fair proof of the advantage of subsoiling.

"I have now 100 acres of wheat and oats growing on what was the very worst part of the whole property, and considered perfectly useless. It has been drained, pared and burnt, and subsoiled exactly after the mode detailed; and it looks as promising as what was so good last year. The land upon which I had potatoes exhibits as decided a superiority; and I shall in another year be able to state what effect subsoiling has upon the turnip crop as upon the produce of the wheat.

R. Denison."

For the New England Farmer.

MARL.

Mr Editor—We were viewing the improvements on a farm the last autumn, and the owner directed our attention to a small hollow, less probably than half an acre, which he described as containing peat of a very superior quality. Taking a cursory survey of the surrounding land, and especially of the road which had manifestly contributed to the increase of substances in the hollow, we suggested the expediency of searching below the peat bed for marl. A distinguished literary gentleman was standing with us, who expressed the opinion that the search would be in vain there or elsewhere in New England. We heard the expression of this opinion with great surprise, for we had been applying what we supposed marl to our land thirty years, and with evident good effect.—Professing nothing beyond practical knowledge, we determined to embrace an early opportunity of consulting the books in our possession, and ascertain, if possible, what name scientific men had given the substances which we had used and called marl. The examination has not been attended with all the success desired. Under many, if not all peat beds, there is an unctuous substance,

which seems not to have been noticed by writers, excepting in regions of lime formations, when it is called marl. Professor Hitchcock says, "Marl for our farmers scarcely exists in the State, except in a few places in Berkshire county, where it is of little use, because the soil already contains so much calcareous matter." The Professor, with other scientific men, supposes in every substance entitled to the name of marl, there must be a certain per centage of lime; therefore he never expects to find marl except in places where there are lime formations or sea shells. May it not be true that there are other substances than lime and other operations in nature than the direct action of this, that will solve the tenacity of clay and prepare it for the seat and nourishment of plants? May not time dissipate the tannin principle from the lowest stratum of the peat bed, introduce a portion of some kind of earth and thus form a richer ingredient for dressing fields than surface peat would make? We are confident from experience it is so. And we believe if Dr. Hitchcock had been engaged in an agricultural, instead of geological survey, that he would have discovered treasure for the farmer beneath the peat bed, and would have urged the citizens of Nantucket, Barnstable and Plymouth counties not only to apply peat to enrich their fields, but to search with diligence for more valuable substances buried under it. These substances we have been in the habit of calling marls. It may be a misnomer—if it be, there cannot be so much wrong in the use of it, as there is in neglect to examine and apply the substances. We have always found them useful to some extent; no doubt the value will very much depend on the original purity of the peat, the character of the surface soil around the bed and the foundation on which it rests. Analysis will prove an important guide to those capable of performing the process, but the results of experience, if we will wait for them, are something more certain. M. A.

Jan. 22, 1841.

For the N. E. Farmer.

INQUIRIES CONCERNING BEES.

Mr Editor—Sir—I have often seen the remark in your valuable paper, that "every man has a tongue, and if not a tongue, has a pen; and when he wants information why should he hesitate or be ashamed to ask for it?"

Feeling, sir, that you are willing to bestow information, and are happy in diffusing knowledge, I take the liberty to ask you a few questions, which to those acquainted with the subject, may appear simple; but to me, as I am not versed in the subject, may be highly useful. The questions are these—1st, what is the best kind of house for bees? 2nd, will bees do better out of doors exposed to all the cold of our winters, than to be carried in the fall into a barn or some other place where they will be kept warm during the winter season? 3d, how will a house made out of doors, tight on all sides, with a wide door in front, and back of the hives, so that in cold weather they may be shut up, and in warm let down, answer? and would this do as well as a house open at all seasons in front of the hives; and what is the best kind of a house? By answering these questions you will much oblige a young farmer and a constant reader of your paper.

Yours, &c.

JAS. M. HARTWELL.

Medford, Jan. 26, 1841.

For the New England Farmer.

CURE FOR SPAVIN IN HORSES.

Mr Editor—Having for several years practiced more or less as a farrier, and wishing to benefit the public by what I have learned, I send you the following recipes for the cure of spavin in horses; for the efficacy of which, not only myself but many of my townsmen can vouch.

Take a strong mixture of copperas and vinegar, with which rub the part affected, keeping the horse dry and stirring him only enough for exercise.

Again.—Take about a pailfull of urine into which throw a quantity (the more the better) of old rusty iron; put the vessel near a fire, and let it stand 3 or 4 days, stirring it occasionally, when it will be fit for use. Apply this mixture twice a day—and in all cases it will soon effect a radical cure, or at least prove highly beneficial.

Yours, &c.,

WM. HARTWELL.

Hillsborough, N. H., Jan. 25, 1841.

For the N. E. Farmer.

THE SUCCESSFUL FARMER.

Mr Editor—I noticed an article in your paper of Dec. 30, taken from the Farmer's Cabinet, stating the good success of an aged farmer in the vicinity of Amherst, N. H. It appears from the statement that his average crop of grain on a farm of 130 acres, was 1500 bushels of wheat, 450 bushels of rye and 500 bushels of corn, annually. His farm was divided into eight fields of nearly equal size; three of which were sowed with wheat, one with rye, and one planted with corn. Consequently his average crop of wheat would be about 31 bushels to the acre, and rye about 28 bushels to the acre, and that his land was manured only once in eight years. Further, it says that the great secret of his success is *system*—that is, change of crops. Now it seems to me that to raise such crops, there must be some secret that is not made known in the statement.

I wish the editor of the Cabinet would be kind enough to give all the particulars in regard to the management of the farm; also, the man's name and place of residence. I should like to visit such a farm, as more can be learned by seeing than by reading. AN INQUIRING FARMER.

[The article alluded to above was not copied from the Farmer's Cabinet, published at Amherst, N. H., but from the paper of the same title published at Philadelphia—and the successful farmer's locality is probably in the vicinity of that city.]

[Communicated.]

HOOF AIL OR FOULS IN HORSES.

The subscriber, having discovered certain substances which are an effectual cure for the fouls in cattle, wishes to give notice to the public, that he makes them into a salve and prepares it in boxes for delivery at 50 cents per box. As this disease is painful and fatal, if not checked in season, it would be well for all owners of cattle to keep this salve on hand. And if used according to my directions, I will warrant a speedy cure in all cases. For the correctness of the above, I will refer to the following gentlemen who reside in Roxbury.

BENJAMIN GUILD.

West Roxbury, Jan. 12th, 1841.

We, the undersigned, do highly recommend the above salve of Mr Guild, for that dreadful disease in cattle called fouls. We have applied it repeatedly, and always found an immediate cure.

John T. Whittemore,	C. P. Hartshorn,
Benjamin D. Lyon,	Laban Adams,
George W. Mann,	William Keith,
Aaron Cass,	William Mayo,
	William Palmer.

N. B.—The salve may be had at the New England Agricultural Warehouse of Joseph Breck & Co.

THE WONDERFUL CIRCASSIAN MULBERRY.

We admitted, a few weeks since, a short article in relation to this mulberry. Some Connecticut "Yankee" has sent us a very entertaining communication upon the subject. Among other things he says, I caution the honest yeomanry of New England to be upon their guard; to be more cautious regarding *all* kinds of humbugs during the administration of ——— than ———," &c. We are ready enough to avow ourself a *whig*, but the cant phrases of politics are out of place in our columns, and the personal allusions of said "Yankee" are more cutting, though playful, than it is right for us to insert from an unknown writer. His general aim is good, and in it we join him; that is, we say beware of humbugry.—Ed.

From the Albany Cultivator.

LARGE CROP OF CARROTS.

Messrs Gaylord & Tucker—Having a yard containing eight rods of ground where sheep had been yarded, I was induced to sow it to carrots. I ploughed and harrowed it, raked off the lumps and stones, (it being of a gravelly soil,) and sowed it in the month of May, in drills one foot apart; but in consequence of the drought which followed, the crop was materially injured. They were hoed twice and harvested in the month of October, and measured from 6 to 15 inches in circumference, and from 9 to 18 inches in length; the produce was 53 bushels and one peck, equal to 1,065 bushels per acre. I think them equal to the beet for cattle or sheep, and far preferable to the ruta baga, though not so easily raised. No roots fed in winter to milch cows, will give cream a finer color or butter a richer flavor than carrots. A. M.

New Haven, Vt.

A valuable Cow.—Mr Barrows, a little west of this village, is the owner of one of the most valuable dairy cows in the county, if not the very best. She is a mixed breed—Durham and Leopard—and is now about 8 years old. Last summer she produced over 21 lbs. of butter in one week, besides supplying the family with what milk was wanted. Mr B. brought us, last week, one or two rolls of nearly equal size, just made, which we found weighed 7 lbs. and 14 ounces—being nearly 16 lbs. per week this winter. He has been offered $150 for her, but has refused to take this handsome sum.—*Syracuse Jour.*

The man who expects to succeed as a farmer, says Von Thaer, must unite energy and activity to reflection, experience, and all necessary knowledge.

PEAT MEADOWS.

There are large tracts of a peculiar soil eminently adapted to improvement in itself, and to the enriching and improvement of other soils, the value of which has scarcely begun to be appreciated. I refer especially to our peat swamps. These are deep deposits of vegetable matter, the accumulation of ages, which, in many cases at an expense which one year's cropping will compensate, may be made in the highest degree productive in grass, potatoes, carrots, and Swedish turnips, and in some cases, as experiment has proved, in corn, rye and wheat. Three tons of English hay per acre are not an unusual crop to be obtained from these lands, and by proper management their productiveness seems almost inexhaustible. I will set aside altogether their value as fuel, though in this respect, within twentyfive miles of a large city, they must be considered, at current prices of fuel, as of very great worth per acre. After two spits of fuel have been taken, the land is still of considerable value to the owner; and if the top-paring, which is unsuitable for fuel, be thrown back, it will in two years afford him a liberal cutting of good fodder for his stock.* But besides all this, the importance of these grounds, as furnishing abundant resources for his compost heap, and enabling him to enrich his higher and perhaps exhausted grounds, is incalculable. Now the amount of this soil in New England is probably much beyond what most persons would suppose. The island of Nantucket, for example, is calculated to contain 985 acres of peat swamp, from one to fourteen feet in depth, which is almost a tenth of its whole territory; and excluding the four western counties of Massachusetts, which abound less in this kind of soil than its eastern portion, it is calculated that there are at least 80,000 acres or 125 square miles of an average depth of six feet four inches, within this single state. Whether, then, we consider the value of this soil in itself for cultivation, or as furnishing the ready means of restoring that, which has been exhausted, we cannot but acknowledge the advantages which it promises to our agriculture.—*Colman's Address at Norwich.*

CLIMATE OF NEW ENGLAND.

The next question respects the climate of New England. There is nothing in the climate of New England which forbids or is unfavorable to the prosecution of a successful agriculture. The winters in most parts of New England are long; and cattle are kept at the barn from six to seven months. But if the season of repose is long, the season of labor and toil is proportionately short. With us, though it be reduced to five months, it is long enough to make ample provision for the winter that is to follow. In a northern climate vegetation is accelerated in proportion to the shortness of the season of life and growth; and nature accommodates herself to her necessities. There are extremes of temperature, which most persons would be glad to avoid. If New England does not occupy the desirable medium, yet it will be allowed that her climate is not surpassed by any in respect to longevity; and our winter seasons are universally acknowledged to be favorable to health and to mental vigor. In most parts of New England the climate allows of the maturing of the most delicious fruits; and there are few portions, excepting the most northerly, of her whole territory, where Indian corn may not be matured. For twentyfour years in succession there has been but a single general failure of the crop of Indian corn. This, though extensive, was not universal; and this might have been in a great measure avoided, had suitable pains been taken in the procuring of the earliest seed and the proper management of the land. With the exception of cotton, rice, tea, and the sugar cane, there is not a single great and valuable agricultural product which may not be successfully cultivated in her territory.—*Ibid.*

*The editor questions whether this be true as a general remark. The meadow must be remarkably dry in which the land will be worth much for many years after taking out peat two spittings deep.

MEANS OF ENRICHING SOIL.

The next inquiry which suggests itself is, whether we have the means of enriching our soils and of rendering them as productive as they may be made. We have first, then, the usual supply of animal manure; and as we are not exporters but are importers of agricultural produce to a considerable extent, this being consumed among us, performs its part in restoring what has been taken from the soil, and in further increasing its productiveness.

Further, in extraneous manures we are by no means deficient. I have already spoken of our peat swamps, and of the vast deposits of this vegetable matter, which are scattered over our territory. Several parts of our territory abound in limestone and in calcareous marls, which it is hoped will prove ultimately of great value. Our sea coasts present an inexhaustible supply of sea-weeds and fish, and of marsh and dock mud and muscle bed. Of ashes in various forms we have the usual supplies. Many of our various manufactories furnish directly valuable manures or materials for manure. This may be said, in particular, of our woollen manufactories; comb and brush manufactories; sugar refineries; extensive tanneries; soap factories; oil and candle establishments; glue factories; and slaughter houses. Our large cities and villages furnish the usual resources for manures to the neighboring towns. Many of our lands likewise, are sensitive to the almost miraculous powers of gypsum; and though New England has within itself no considerable deposits of this valuable mineral, yet it is easily procured, and may be furnished to every part of the Commonwealth at a reasonable expense—an expense in no case, where its efficacy is ascertained, such as to discourage its use. —*Ibid.*

SAVING MANURES.

We have made as yet, small advances in the art of saving and compounding manures. There is little doubt that as much valuable manure is now lost or thrown away, through ignorance or neglect, as is used. The practice of renovating and enriching land by ploughing in green crops, or by inverting the old sward, is seldom practiced among us, although where this has been done, the effects have surpassed the most sanguine anticipations. The introduction of bone manure and poudrette, is likewise recent; but from their proved efficacy and the facility of their transportation, they are likely to prove extraordinarily beneficial. In New Jersey, I have witnessed the most remarkable effects of a newly discovered marl, of an alkaline character, and of great efficacy. It has more than doubled the value of lands in the neighborhood of the pits where it is found. The application of one hundred bushels of this marl to land which under common cultivation would produce not more than 20 bushels of corn to the acre, causes it to yield 60 bushels, and wheat and clover in proportional abundance. Nor are its effects transient, but it produces a permanent improvement of the soil, the duration of which is not yet ascertained. In this respect it differs most favorably from ashes and many other manures, whose efficacy is continued seldom more than one or two years. At present this marl is delivered at the pits at seven cents per bushel, and might be delivered at many of the ports of New Jersey at a small advance upon that price. The farmers of Long Island have for years been in the habit of purchasing for their wheat fields our leeched ashes at a cost of ten and twelve cents per bushel. If these shrewd farmers have then found an advantage in coming to our ports after our drawn ashes, why may not we import marl from New Jersey,—a substance far more efficacious and more enduring in its effects than ashes, at even a less price than is paid for our ashes?

In regard then to manures and the means of enriching our lands in New England, there is no deficiency; but we are greatly wanting throughout the State, in frugality to save the vast amounts which are now wasted; in industry to collect the means around us; and in skill and labor in preparing them for use. In soil, climate, and manures there is no impediment in New England to a successful agriculture.—*Ibid.*

EFFECTS OF CLIMATE UPON MAN.

Our climate is, as I have remarked, favorable to labor. The severe and relaxing heats of summer are of short duration, and seldom of such intensity as that moderate labor is not in truth a refreshment. The elasticity of our autumnal and winter atmosphere induces to activity, and renders muscular exertion a pleasure. A day in the very depth of winter, spent in collecting wood in the unbroken silence of the leafless forest, with a deep bed of snow under your feet; the battling through the day with a drifting northeast snow storm, bristling with crystals of ice, or the beating your way and opening a sort of subterranean passage through the piled up waves of snow, which sometimes fill up our roads, to the well clad and well fed are often days of as healthful and agreeable an excitement, as far as mere physical pleasure is concerned, as are ever enjoyed by the more favored children of luxury and indolence in the elysian fields of the tropical zone.—*Ibid.*

CROPS TO BE CULTIVATED.

My last topic is, what branches of agriculture can be most profitably pursued in New England. I cannot go largely into this subject; for carry as large a swarth as I could swing, I could not even mow once half round the field. The simple answer to be given is, that with good husbandry, we may raise, with a fair profit, of whatever the climate will produce, every thing which we need to eat, drink, or wear. The first of all rules in domestic economy, as far as the actual wants of his family are concerned, is for the farmer never to go abroad for what he can produce at home. There may be exceptions to this rule among those who reside near the capital, and who are rather gardeners than farmers; but there is no exception with respect to those who dwell in the interior. Beyond this, the farmer must select the objects of his cultivation, with a particular reference to his location, soil, aspect, climate, the facility or difficulty

of procuring labor; and especially the market and the demand. He should have some reference likewise, to the permanency or the perishable nature of the crops or products which he raises. In the former respect, Indian corn yields to none other. I have in my possession, an ear of corn grown in the year of the total eclipse, 1806, as sound and perfect as the day on which it was gathered.— *Ibid.*

OURS A HAPPY LOT.

We have every reason to thank a kind Providence for the land of our birth, and to cherish and strengthen those bonds of affection which bind us to the place of our nativity. If its climate afford no perpetual summer, use reconciles and even attaches us to its changing seasons: and to the reflecting mind, the generous, intelligent, and pious student of nature, even stern winter is not barren of objects, in the highest degree picturesque, beautiful, sublime and elevating. If its soil is hard, and it requires a bold heart to contend with the difficulties which lie in our way, the efforts which are necessarily called out invigorate the physical frame, and give energy and elasticity to the mind.

There is no ground to complain of the place where Divine Providence has cast our lot. Let us regard it as the highest duty of patriotism, philanthropy and religion, to bring each one his humble but hearty contribution to the general stock of good; and to labor in his vocation, to do what he can and all he can, to improve, elevate, enrich, embellish and make happy the community in which he lives.—*Ibid.*

For the New England Farmer.

BEES.

The last season was peculiarly favorable to the operations of bees, inasmuch as there were fewer high winds to molest them in their labors and less rain to drench the flowers than usual. We believe they made the most of their advantages every where, but have as yet seen no statements of any one's success with them. Being blessed with the "gift of the gab," we presume to offer the result of labors in our own colony, thereby "breaking the ice," and hoping others who have done better, will tell us, and how they managed. We had only three hives on the first of May, and neglected to take up our honey until late in September. Six of our best swarms are wintering, and from the later ones which we "took up" we had 176 pounds of honey. Whether this is doing well or not, we are unable to say, as we have not much experience in the business. It is the best we have ever done, however. Our hives thus far are all of the old-fashion kind, and we kept the swarms scattered in different parts of the garden, in rather shaded positions, standing upon stools raised but little from the ground. We found no appearance of moth in any of the hives taken up, and are rather confident in opinion that the best preventive of their depredations is the healthfulness and vigor of the swarm. Our bees at no time of swarming showed any disposition to emigrate from the premises, though in two or three instances they showed so much dissatisfaction with their hives as to leave them. Keepers of bees are in duty bound to furnish them with as much pasture near home as possible; hence floriculture may become an object with all who keep them—and of all flowers for their benefit, we think mignionette most valuable. W. B.

Mount Osceola, 1841.

CAUSE OF THE INEFFICACY OF GYPSUM ON ACID SOILS.

I do not pretend to explain the mode of operation by which gypsum produces its almost magic benefits: it would be equally hopeless and ridiculous for one having so little knowledge of the successful practice, to attempt an explanation, in which so many good chemists and agriculturists, both scientific and practical, have completely failed.—There is no operation of nature heretofore less understood, or of which the cause or agent seems so totally disproportioned to the effect, as the enormous increase of vegetable growth from a very small quantity of gypsum, in circumstances favorable to its action. All other known manures, whatever may be the nature of their action, require to be applied in quantities very far exceeding any bulk of crop expected from their use. But one bushel of gypsum spread over an acre of land fit for its action, may add more than twenty times its own weight to a single crop of clover.

However wonderful and inscrutable the fertilizing power of this manure may be, and admitting its cause as yet to be hidden, and entirely beyond our reach—still it is possible to show reasons why gypsum cannot act on many situations, where all experience has proved it to be worthless. If this only can be satisfactorily explained, it will remove much of the uncertainty as the effects to be expected: and the farmer may thence learn on what soils he may hope for benefit from this manure—on what it will certainly be thrown away—and by what means the circumstances adverse to its action may be removed, and its efficacy thereby secured. This is the explanation that I shall attempt.

If the vegetable acid, which I suppose to exist in what I have called acid soils, is not the oxalic, (which is the particular acid in sorrel,) at least every vegetable acid, being composed of different proportions of the same elements, may easily change to any other, and all to the oxalic acid. This, of all bodies known by chemists, has the strongest attraction for lime, and will take it from any other acid which was before combined with it—and for that purpose the oxalic acid will let go any other earth or metal which it had before held in combination. Let us then observe what would be the effect of the known chemical action of these substances on their meeting in soils. If oxalic acid was produced in any soil, its immediate effect would be to unite with its proper proportion of lime, if enough was in the soil in any combination whatever. If the lime was in such small quantity as to leave an excess of oxalic acid, that excess would seize on the other substances in the soil, in the order of their mutual attractive force; and one or more of such substances are always present, as magnesia, or more certainly, iron and alumina.—The soil then would not only contain some proportion of the oxalate of lime, but also the oxalate of either one or more of the other substances named. Let us suppose gypsum to be applied to the soil. This substance, (sulphate of lime) is composed of sulphuric acid and lime. It is applied in a finely pulverized state, and in quantities from half a bushel to two bushels to the acre—generally not more than one bushel. As soon as the earth is made wet enough for any chemical decomposition to take place, the oxalic acid must let go its base of iron, or alumina, and seize upon and combine with the lime that formed an ingredient of the gypsum.—The sulphuric acid left free, will combine with the iron or the alumina of the soil, forming copperas in the one case, and alum in the other. *The gypsum no longer exists*—and surely no more satisfactory reason can be given why no effect from it should follow. The decomposition of the gypsum has served to form two or perhaps three other substances. One of them, oxalate of lime, I suppose to be highly valuable as manure; but the very small quantity that could be formed out of one or even two bushels of gypsum, could have no more visible effect on a whole acre, than that small quantity of calcareous earth or farm-yard manure. The other substance certainly formed, copperas, is known to be a poison to the soil and to plants—and alum, of which the formation would be doubtful, I believe is also hurtful. * * Soils that are naturally calcareous, cannot contain oxalic acid combined with any other base than lime. Hence gypsum applied there, continues to be gypsum, and exerts great fertilizing power.—*Ruffin's Essay on Calcareous Manures.*

Massachusetts Horticultural Society.

EXHIBITION OF FRUIT.

Saturday, Jan. 16, 1841.

Benj. V. French, Esq., exhibited the following Apples, viz: Ortley Pippin, Black (Coxe, No. 67) Reinette du Canada; Yellow Bellflower; Winter Nonsuch; Wellington, and one sort unknown. Also, specimens of King's Bon chretien Pear, (so called.)

M. P. Wilder, Esq., exhibited Easter Beurre Pears—very fine.

E. Phinney, Esq., exhibited specimens of a large oblong red apple, name unknown.

S. Downer, Esq., exhibited Easter Beurre Pears, grown in the garden of Capt. John D'Wolf—very handsome. These pears as well as those exhibited by Mr Wilder, were the produce of standard trees, and in size, color, and flavor, were equal to any specimens of this fruit we have ever seen.

Mr Manning exhibited the following Apples, viz: Pumwater Sweet, Bellflower, Sweet Baldwin, Reinette, Noir Sanguine, Cat-head Greening, and one sort unknown. Also, the following Pears: Catillac, Wedale's St. Germaine (Belle d' Jersey or Pound, of American Catalogue,) and Bon chretien Turc, or Flemish Bon chretien, of the London Horticultural Society.

The Canadian Reinette, exhibited by Mr French, was of large size and fine flavor. We give Mr Thompson's opinion of this fruit, in the following extract from the London Hort. Society's Catalogue: "Good bearer, and though large, of excellent quality. Even as a dessert fruit, it is probably the best apple of its size, and surpassed by few of those that are smaller: it therefore deserves extensive cultivation."

The origin of Pumwater Sweet and the Red Sweet Baldwin, are unknown to the Committee: they may possibly prove synonymous with other well known apples. Information on this point is respectfully solicited.

For the Committee,

ROBERT MANNING.

To prevent water from freezing in a pump, it is only necessary to bore a small hole in the pump a few inches below the platform, to allow the water to escape. There is also another advantage from this: the water by agitating the air in the well, purifies it.—*Bangor Whig.*

NEW ENGLAND FARMER,
AND HORTICULTURAL REGISTER.

BOSTON, WEDNESDAY, FEB. 3, 1841.

NEW ENGLAND FARMER.

A WEEKLY PAPER.

The Editorial department of this paper having come into the hands of the subscriber, he is now authorized by the publishers to inform the public that the price of the paper is reduced. In future the terms will be $2 per year *in advance*, or $2 50 if not paid within thirty days.

The Editor's only promise is, that he will endeavor to make the paper instructive and useful to the agricultural community.

His friends and Postmasters who may think him fitted for the duties of his place, will confer a favor by giving this prospectus as wide a circulation as their circumstances will allow, and forwarding the names of such as choose to subscribe. ALLEN PUTNAM.

N. B.—Postmasters are required by law to frank all subscriptions and remittances for newspapers, without expense to subscribers.

BOOK FARMING.

"Book farming. Do *the words* produce a sneer? Be that as it may, the *thing*, or what is often stigmatised as *that thing*, is not contemptible. For what is it? Not an attempt to comply with the advice and copy the example of every one who furnishes an article for an agricultural journal; not the adoption of every method of husbandry that is recommended in print; not a departure from all the usages of our fathers and neighbors; not a preference of the theories contained in books to the results of experience. No. I pity the stupidity of the man who thinks that if we use books, we must close our eyes against the light that is beaming upon us from other sources; or that we must become mere theorisers, and the victims of ruinous experiments.—What! does a man lose his common sense, his prudence and his judgment, whenever he takes up an agricultural paper or opens a book upon husbandry? Cannot one make himself acquainted with the doings of others without losing his power to judge whether it would be well for him, in his circumstances, to copy their examples? Our brains are not so weak as this. The knowledge acquired from books does not make us all mad. But if it did, there would be more zest and true enjoyment in the learned mad-man's course, than in that of him who has learned out, and who thinks that books cannot make him wiser. I asked what book-farming is? Common book-farming is learning by means of books, new facts, opinions, results of experiments, modes of operation, and the using such parts of the information as can be turned to profitable account in our individual situations. If this be folly, we are content to be called fools. An agricultural paper will be worth to you every month, if not every week, more than its annual cost."

The preceding extract is from an Address delivered by us before the Essex Agricultural Society in 1839, long ere we had any thoughts of being peculiarly interested in the prevalence of such views. Those were our disinterested convictions. No misgivings as to their correctness trouble us now.

Few can be found who would more studiously avoid advising farmers to be guided and governed by what is printed, *solely because it is printed*, than the Editor. His aim is to help farmers to think; to give them such facts as he can obtain; such opinions as others communicate; such views as he holds. The reader must select from the mass such as may, in his judgment, be turned to useful purposes by himself. He who weekly reads an agricultural paper will find in it food for thought—will be influenced to observe more carefully the processes of vegetation around him, and will thus become a more intelligent cultivator, even though he should never think of complying with the advice of any writer. We must admit to our columns many opinions, the correctness of which we very much doubt. When a practical man sends us facts, we must, in many cases, accompany them by his own views and inferences. In many communications we find some things which do not coincide with the opinions we entertain; but as this does not *prove* them incorrect, they are inserted in order that they may be seen and judged of by the reader. In no other way is it possible to do justice to the many with whom we are connected. While we ask farmers to read, we charge them never to abandon the use of light which comes from experience and their own good sense.

FARMERS' MEETINGS IN THE COUNTRY.

On the evening of Wednesday, two weeks since, we had the pleasure of meeting and speaking before the farmers of Newton. Some gentlemen of that place, desirous of deepening the interest in agriculture, invited us to visit them and make such remarks as we were able, in the furtherance of their object. We trust they may persevere and form an association which will furnish them with opportunity for mutual instruction and inquiry. Such an association in which the results of experiments and observation may be compared, cannot be otherwise than instructive and useful.

On the evening of the last Wednesday, we made a very pleasant excursion to Westboro', where we addressed a large assembly of genuine farmers. Our congratulations were given to them as being among the pioneers in forming town associations. We predicted that such associations will spring up in all parts of New England, and will send forth rills of agricultural knowledge, fertilizing every valley through which they may flow.—We know not any means of widening and deepening the interest in farming, so likely to be efficacious as these local associations. Having in our remarks described several of the ploughs which were tried at Worcester last autumn, we were addressed at the close of the evening by a gentleman, who stated that he purchased the identical plough, of Howard's make, for which a premium was there given; that it does, upon full trial, perform its work precisely as we judged; and that he would not part with it for fifty dollars. We thought this plough surpassed all others in cleaning out its furrows and making them of equal depth on both sides. In our judgment, there is none, taking it in all points, and for all varieties of soil, better than this.

THIRD AGRICULTURAL MEETING AT THE STATE HOUSE.

On the evening of Thursday last, at the State House, the president being absent, Captain J. Prince, of Roxbury, was called to the chair. The discussion was resumed upon the *cultivated grasses*.

The speakers were much the same as last week, and but few important facts were stated in addition to what we have already published. Mr Colman intimated that *we* misreported him, in stating that the number of *cultivated* grasses is 600—*all* the kinds (including uncultivated) amount to that sum. Lobelia was rolled over the tongues of the speakers for a long time, but whether the horse will allow it to come in contact with *his* tongue, remains a profound mystery. The best age at which to cut herds grass and red top—whether when just passing out of flower, or when the seed is just full, or when they are quite ripe, is unsettled. Each time had its advocates. Chemistry may find more nutritive matter in that which is *ripe*—but our question should be whether the digestive organs of the horse or ox will extract more food from it in that state, than if cut younger.

Subject for to-morrow evening—*Stock*.

FIELD PREACHING.

No. 3.

Charity envieth not.—ST. PAUL.

That country Miss who is obliged to form and preserve an acquaintance with the wash-tub and cooking utensils, may sometimes wish that the daughter of wealth might be compelled to exchange places with herself: that boy, whose hands are busied with the shovel and hoe, may think that he who handles the yard stick behind a counter, and he whose hours are devoted to sports for "killing time," have a happier lot than his own; the stirring wife of the farmer is prone to wish that she, like the squire's lady, could sit down in the parlor with "a clean apron" on as often and as long as she pleased; the farmer himself may look with a discontented eye upon those who seem to get ahead with less hard work than comes in his own course. But good friends, young and old, male and female, yours is a condition abounding in as many solid comforts as any other. *Charity* will not envy, and why should you? This envy disquiets its possessor; it blisters the soul in which it burns. Avoid it and seek contentment with your lot. Seek for charity; she is the fruit most profitable for cultivation. Faith is the root fixing itself and feeding in the soil of truth; hope is the heaven-aspiring blade—charity is the immortal fruit. With this ripened in your moral field, you are rich.

THE EXTREMES.—There is a place on earth, where pure joys are unknown, from which politeness is banished, and has given place to selfishness, contradiction, and half-veiled insults. Remorse and inquietude, like fiends that are never weary of assailing, torment the inhabitants. This place is the house of a wedded pair who have no mutual love, nor even esteem.

There is a place on earth to which vice has no entrance—where the gloomy passions have no empire—where pleasure and innocence live constantly together—where cares and labors are delightful—where every pain is forgotten in reciprocal tenderness—where there is an equal enjoyment of the past, the present, and the future. It is the house, too, of a wedded pair, but who in wedlock are *lovers still*.—*St Lambert*.

NEW ENGLAND.—The farmers of New England have every reason to thank God for the condition in which they are placed. They need not sigh for more genial climes nor more fertile soils. These they cannot have without dreadful abatement of health and comfort. Of all the conditions on earth, which it has been my lot to see or read of, I am bold to aver, that I know of none more favorable to health, competence, enjoyment, and moral improvement, than that enjoyed by the rural population of New England. I despise the contempt with which some pretend to look down upon us; and the opprobrium which they have the impudence to cast upon our habits of thrift and frugality. I deem it my highest boast, that I am a New England man and a Yankee. I do not ask to have a living without labor. This would be asking for a curse instead of a blessing, and a boon for which I have no claim. I only ask that

a living shall be secured to me with reasonable labor, and this New England in her various departments of industry promises to all her children. * * In the midst of what others deem evils, I see innumerable compensations for which I look in vain to other countries and climes apparently more favored. In whatever direction I turn my eyes, there is every where such an exuberance of blessings to those who will perform their duty, that it would be the height of ingratitute to complain, and the height of folly to abandon a certain good for that which is at best uncertain and doubtful. I cling to her with the warmest affection of a child; and having been so long sheltered and nourished by her never failing care and kindness, I ask only that I may find my last resting place in the lap which gave me birth.—H. COLMAN.

THERMOMETRICAL.

Reported for the New England Farmer.

Ranges of the Thermometer at the Garden of the proprietors of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, week ending Jan. 31.

Jan. 1841.		7 A.M.	12, M.	5, P.M.	Wind.
Monday,	25	29	30	34	E.
Tuesday,	26	28	37	31	N. E.
Wednesday,	27	38	44	40	S. W.
Thursday,	28	34	40	35	N.
Friday,	29	26	33	32	E.
Saturday,	30	24	40	30	W.
Sunday,	31	20	37	35	W.

BRIGHTON MARKET. — MONDAY, FEB. 1, 1841.

Reported for the New England Farmer.

At Market 390 Beef Cattle, 70 Stores, and 1250 Sheep. 60 Beef Cattle unsold.

PRICES.—*Beef Cattle*—We reduce our quotations to conform to sales to day. A few were sold on Saturday at higher prices. We quote a few extra, $6 25.—First quality $5 75 a 6 00. Second quality, $5 00 a $5 50. Third quality, $4 25 a $5 00.

Sheep.—We quote lots at $2 00, $2 50, $2 75.—Wethers, $3 75, $4 25, $4 75 and $5 00.

Swine.—None at Market. About 200 are expected next week.

WHOLESALE PRICES CURRENT.

Corrected with great care, weekly.

SEEDS. Herds Grass, very little in market, $3 asked. Red Top, by the bag 60 to 70 c. Clover—Northern, 12 1-2 c. very little in Market.—Southern, plenty, 9 to 10 c. Flax Seed, $1 37 to 1 50 bu. Lucerne, 25 c. per lb.

FLOUR. Howard Street $5 37—Genesee $5 31—Ohio $5 12.

GRAIN. Corn—Northern Yellow 60 to 61 c.—Round Yellow 57 to 58—Southern Flat Yellow 55—White 53. Rye—Northern 65 to 67—Southern 60 to 65. Oats—Southern 35 to 38—Northern 40 to 44.

PROVISIONS. Beef—Mess $10 50 to 11 00—Prime $6 50—No. 1 $9 00. Pork—Extra—15 00—Clear 14 50—Mess $13 00. Hams—Northern 9 c. per lb—Southern, none. Lard—Boston 9 c per lb.—Southern, 8 to 8 1-2. Butter—Lump 18 to 22—Firkin 12 to 18—Shipping 8 to 14. Whole Hogs 5 1-2 to 6 c.

HAY, per ton, $17 to 17 50—Eastern Screwed $12 to 13 50

CHEESE—Old 11 c.—New 8.

EGGS. 20 to 25.

POULTRY—Chickens 11 to 12 1-2 c. per lb.—Turkeys 12 1-2—Geese 10.

WOOL—The market for this article has not experienced any change of late. Pulled Wool is rather scarce, and there is but a limited supply of low Fleeces and of fine Fleeces the stock is also moderate. Prime or Saxony Fleeces, washed, lb. 50 to 55 c.—American full blood, washed, 47 to 50—Do 3 4 blood, washed. 44 to 46—Do. 1-2 blood, washed, 36 to 40—1-4 and common do, 35 to 37—Smyrna Sheep, washed, 20 to 28—Do. unwashed, 10 to 14—Bengasi Sheep, 8 to 10—Buenos Ayres unpicked, 7 to 10—Superfine Northern pulled lamb 43 to 46—No. 1 do. do. 37 to 42—No 2 do do 26 to 30—No 3 do do 18 to 20.

GARDEN SEEDS,

For sale by JOSEPH BRECK & Co. at the NEW ENGLAND FARMER OFFICE, *No.* 51 and 52 *North Market St. Boston.* The subscribers would inform the public that they have now on hand the largest collection of seeds ever before offered by sale in this city, embracing every variety of *Field, Kitchen, Garden,* and *Ornamental* Flower Seeds desirable for this or any other Climate.

Our seeds are either raised under our own inspection or imported from responsible houses in Europe, and having taken extraordinary pains to obtain such as are pure and genuine, we can confidently recommend them to our customers and friends, and feel assured they will prove satisfactory to all who try them.

Dealers in seeds are requested to forward their orders in season. Boxes for retailing from 8 dolls. and upwards will be sent out on commission allowing a liberal discount and take back what remain unsold.

Letters and orders with good reference will meet with prompt attention.

FIELD SEEDS.

Sugar Beet.	Ruta Baga.
Mangel Wurtzel.	Ballatine's New Royal do.
New Red Globe do. } superior	White Tankard Turnip.
Yellow do. } varieties.	Red do.
Carrot Long Orange.	Red Round do.
" Altringham.	White do.
" New White, extra fine.	White Globe do.
Pumpkin, sorts.	Green Round do.
Wheat—various sorts.	Purple Top Hybrid do.
Barley, do.	Buckwheat.
Rye, do.	Broom Corn.
Potatoes, do.	Millet.
Indian Corn, do.	Buckthorn. } for Hedges.
Oats, do.	Locust. }

GARDEN SEEDS.

Artichoke, Asparagus, Beans of every description, Beets of sorts, Borecole, Broccoli, Brussels Sprouts, Cauliflower, Caraway, Celery, of the most improved sorts, Cabbage 20 sorts, Carrot, all the varieties, Cucumber do, Cress, Egg Plant, Endive, Indian Corn, Kale, Leek, Lettuce in great variety, Melons, do. Martynea, Mustard, Nasturtium, Okra, Onion of sorts, Pepper do. Pumpkin do. Parsnip, Parsley, Peas, a very great variety, Rhubarb for tarts, Radish of sorts, Salsify, Squash of sorts, Tomato, Turnip 20 varieties.

SWEET AND POT HERBS.

Thy	Sweet Basil.
Sweet Marjorum.	Lavender.
Sage.	Lemon Balm.
Summersavory.	Anise.

Medicinal Herbs, &c.

ORNAMENTAL FLOWER SEEDS.

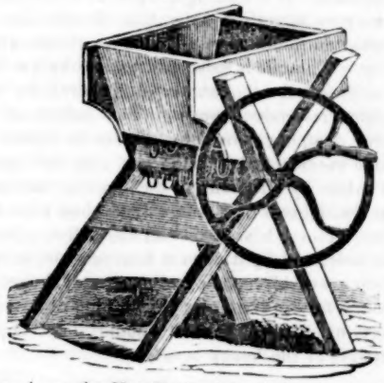
Three hundred varieties, embracing all the finest sorts. Packages of 20 fine sorts for one dollar.

Those who prefer to have their Seeds put up in papers ready for retail, can be accommodated—each packet neatly closed and labelled with printed directions. Price 50 cents, per dozen papers, which are retailed here at 6 1-4 cents each.

Fruit and ornamental trees, of the greatest variety, supplied at nurseryman's prices, and orders solicited. These will be packed, when required, to go to any part of the U. States. JOSEPH BRECK & CO.

Boston, Jan. 27, 1841.

WILLIS'S LATEST IMPROVED VEGETABLE CUTTER.



For sale at the New England Agricultural Warehouse, No. 51 and 52 North Market Street, Boston, Willis's Latest Improved Vegetable Cutter. This machine surpasses all others for the purpose of cutting Ruta Baga, Mangel Wurtzel, and other roots. The great objection to other machines, is their cutting the roots into slices, which makes it almost impossible for the cattle to get hold of them: this machine with a little alteration, cuts them into large or small pieces of such shape as is most convenient for the cattle to eat. It will cut with ease from one to two bushels of roots per minute. JOSEPH BRECK & CO.

PURE SPERM OIL.

EDMUND T. HASTINGS & CO.

No. 101 State St keep constantly for sale, Winter, Spring and Fall Sperm Oil, bleached and unbleached; which they warrant to be of the best quality and to burn without crusting.

Oil Canisters of various sizes.

Boston, Jan. 1, 1841. 1sly

GREEN'S PATENT STRAW CUTTER.

JOSEPH BRECK & CO. at the New England Agricultural Warehouse and Seed Store Nos. 51 and 52 North Market Street, have for sale, Green's Patent Straw, Hay and Stalk Cutter, operating on a mechanical principle not before applied to any implement for this purpose. The most prominent effects of this application, and some of the consequent peculiarities of the machine are:

1. So great a reduction of the quantum of power requisite to use it, that the strength of a half grown boy is sufficient to work it efficiently.

2. With even this moderate power, it easily cuts two bushels a minute, which is full twice as fast as has been claimed by any other machine even when worked by horse or steam power.

3. The knives, owing to the peculiar manner in which they cut, require sharpening less often than those of any other straw cutter.

4. The machine is simple in its construction, made and put together very strongly. It is therefore not so liable as the complicated machines in general use to get out of order.

BACHELDERS' PATENT PLANTING MACHINE

This Machine, recently invented by L. & S. H. BATCHELDER, of Hampstead N. H. is one of the most convenient and labor saving implements ever introduced to the notice of the farmer It is simple in its construction, and certain and regular in its operation. It is calculated to plant all kinds of seed usually planted in hills or drills.

This Machine is constructed on principles altogether different from all others of similar purpose. It performs the operation of planting without opening a furrow, thereby dispensing with covers, that are continually liable to clog, and get out of order. It simply raises the soil a little, and at the same time drops the seed at any distance desired, when the soil falls back to its original place. and is immediately followed by a moveable guage, that leaves the soil to any depth over the seed which the operator chooses; it also removes all small stones and sods from the ground where the seed is deposited.

This Machine has been in operation during the past season and thoroughly tested by practical Farmers and Mechanics in Massachusetts and New Hampshire, and is pronounced by them a complete and useful Machine, and is allowed by all who have seen it, to be superior to every other implement of the kind now in use in the United States. It operates equally well on wet or dry ground, and is warranted to work well on any ground that can be furrowed with the common plough.

☞ Orders will be received by L. & S. H. BACHELDER, *Hampstead, N. H.*, or by the subscriber at *Haverhill, Mass.*, their General Agent for the United States, for the Planter, or a right to manufacture and dispose of them. Any communication addressed to either will receive attention. T. J. GOODRICH.

Deerfield, N. Y May 27, 1840.

TO THE PUBLIC.—We whose names are hereunto annexed, certify that we have examined *Bachelders' Patent Planting Machine*, and seen it operate on several of our farms in Deerfield, Oneida County; the seed planted thereby seems well planted, wherever the ground is in proper order, and is now coming up; and we believe the Machine fully answers the description given of it in the handbills describing and recommending it, and heartily concur in said recommendation, believing as we do that it will prove a valuable labor saving Machine, and on good land will soon supersede the labor of planting by hand in the old and common method.

DOLPHUS SKINNER,
SAMUEL LOOK,
BENJAMIN NORTHAP.

1am. Dec. 30.

MISCELLANEOUS.

CLEARNESS OF SOUND AT NIGHT.

The greater clearness with which distant sounds are heard in the night, is an interesting phenomenon. It was noticed by the ancients, and ascribed to the repose of animated nature. When Humboldt heard the noise of the great cataracts of the Oronoco, his attention was directed to this curious fact; and he was of the opinion that the noise was three times louder during the night than in the day. As the humming of the insects was much greater in the night than in the day, and as the breeze which might have agitated the leaves of the trees, never rose till after sunset, he was led to seek for another cause of the phenomenon. In hot days, when warm currents of air ascend from the heated ground, and mix with the cold air above, of a different density, the transparency of the atmosphere is so much affected, that every object seen through it appears to be in motion, just as when we look to an object over a fire, or the flame of a candle. The air, therefore, during the day, is a mixed medium, in which the sounds are reflected and scattered in passing through streams of air of different densities, as in the experiment of mixing atmospheric air and hydrogen. At midnight, on the contrary, when the air is transparent and of uniform density, as may be seen by the brilliancy and number of the stars, the slightest sound reaches the ear without interruption. M. Chladni has illustrated the effect of a mixed medium by an experiment of easy repetition. If we pour sparkling champaigne into a tall glass till it is half full, the glass cannot be made to ring by a stroke on its edge, but emits a dull, disagreeable and puffy sound. The effect continues as long as the effervescence lasts, and while the wine is filled with air bubbles. But as the effervescence subsides, the sound becomes clearer, till at last the glass rings as usual, when the air bubbles disappeared. By re-producing the effervescence the sound is deadened as before.—The same experiment may be made with effervescence of malt liquors; and with still more effect by putting a piece of a sponge, or a little wool or tow into a tumbler of water. The cause of the result obtained by M. Chladni, is that the glass and liquid contained, in order to give a musical sound, must vibrate regularly in unison as a system, and if any considerable part of a system is unsusceptible of regular vibration, the whole must be so.—This experiment has been employed by Humboldt to illustrate and explain the phenomenon of distant sounds being more distinctly heard during the night.—*Encyclo. Amer.*

THE MAN THAT WISHED FOR DEATH.

The habit of avoiding personal danger, or the instinct that leads to the preservation of life is so strong, that persons who are resolved on suicide, sometimes conduct in a very ludicrous manner, under the fear of that death which they are desirous of procuring.

We have heard a story of a countryman who had made up his mind to "shuffle off his mortal coil," and only waited until he had settled in his mind the most comfortable way of dying. Not being able readily to agree with himself on this important point, he informed a neighbor of his, whom he met with his axe on his shoulder, that he was resolved upon death, and would take it as a great favor if he would assist him in the accomplishment of his purpose. His neighbor being willing to humor the candidate for a change of worlds, told him he was just going into the woods to chopping, and that if he would accompany him he would fell a tree upon him, and put an end to his life with a very little trouble.

"I'm very much obliged to you," said the weary-of-the-world, "and shall consider myself bound to you for life. I'll go and be killed directly."

Accordingly he followed the axe-man to the woods. A tall tree was chosen, and he was directed where to stand, so as to receive the full force of its fall. He fixed himself on the spot, folded his arms, and prepared to wait the event. The chopper began to lay on the vigorous blows, while the death candidate kept his eye upon the top of the tree, to see when it would fall. He stood very composedly for a while; but at length began to appear uneasy and not perfectly satisfied with his prospects. And while the axe-man seemed to him to redouble his blows, he kept winking and winking, he thought he perceived the tree begin to nod, and that the next moment would be his last. The cold sweat began to issue from his skin, his limbs trembled—he could stand it no longer! He took to flight and never looked behind him until he had got at least forty rods, when he ventured to stop. He was pursued by the axe man, who on coming up, asked him why he ran away.

"Oh," said he, "I was afraid if I staid there I should be killed!"

"I thought," returned the chopper, "you came on purpose to be killed."

"Ah, true," replied the man with great simplicity, "but I forgot that. O how I tremble! If I'd staid there a minute longer, I should have been a dead man. What a crash it made when it fell!"

"Crash! why the tree is standing yet. I merely chopped with the head of the axe."

"With the head of the axe! do you say so? O you cheating rascal! But I'll never trust you to kill me again, I'll be hanged if I do."

THE HONEY BEE.

This bee, when collecting the pollen of flowers, which constitutes the "bee bread," never passes from one kind of flower to another, as has been supposed. If it first light upon a honeysuckle, it continues to collect from this flower until it has loaded its thighs with as much as it can carry away. The bee is governed in this by an instinct that makes it a co-laborer in the ordinary work of natural re-productiveness. The pollen, or fructifying dust, is carried from flower to flower of the same species, and thus the bee aids the operations of nature by distributing the pollen, necessary to the fruitfulness of plants. If the bee were to pass from a clover blossom, with the pollen adhering to its body, and light upon a honeysuckle, would produce a hybrid, or mongrel species of flower. How wonderful are the orderly operations of nature! and certainly among the most wonderful is this peculiar instinct of the honey bee.

New Drink.—"Mr Guzzlefunction, I have discovered a new drink for you. Suppose you try a little."

"Well, I don't care if I do: [drinks.] It hasn't got a very bad taste to it; and if my memory serves me right, it is what they call water. I recollect drinking some of the stuff when I was a lad."

POUDRETTE.

This valuable manure may be had on application to the subscriber, at the office of the "*New York Poudrette Company*," No. 120 Nassau street, New York. It is *in-odorous*, and may be transported in barrels, on board of any vessel or steamboat, without offence—and it will be found an exceedingly valuable article as a *fertilizer* on *any* soil, and for *any* crops; but more especially for gardens and flowers, as there are no foul seeds in it. Poudrette has been used for three seasons with entire success on Long Island, by many practical farmers, as may be ascertained from letters and statements made by them, and published at this office in a pamphlet containing also the "*act of incorporation*," granted to the Company by the Legislature of the State of New York; and other facts in relation to the subject. *Price* 35 cents *per bushel*. Barrels cost 25 cents each, and hold 4 bushels. Persons wishing to make an experiment on a small scale can obtain *one barrel* by enclosing a *two* dollar current bank bill—or *three* barrels by enclosing *five* dollars, free of postage. *On receipt of the money* the article will be put up and forwarded as directed.

*** Price of shares, one hundred dollars—which entitles the holder to *one hundred bushels* of poudrette annually, during the term of the charter; fifty bushels in time for *spring* use, and fifty bushels in time for *fall* use. Shares taken soon, will be entitled to the spring dividend—and, if desired for experiment, a few bushels may be had this fall.

All orders, or applications in relation to the business, must be made to the subscriber, 120 Nassau street, New York. D. K. MINOR.

☞ I wish it distinctly understood that the "*New York Poudrette Company*" is in no way connected with the "Lodi Manufacturing Company," of which *Anthony Dey* and *Peter Barthelemy* are, or were, the managers.

Dec. 9, 1840. 3m. D. K. M.

POUDRETTE.

The subscribers reside in the state of New Jersey, many of us in the vicinity of the works erected by Anthony Dey, of the city of New York, on the Hackensack river, in New Jersey, for the manufactory of Urate and Poudrette, called "*The Lodi Manufacturing Company*" We have used the poudrette on the Spring Crops this year, 1840. We find it *a valuable manure, superior to any other kind that we have ever used, and considering the facility of its transportation to the field, the small quantity required in the application to the crops, the quickness of its operation on vegetable matter, and the ease with which it can be applied,*—all tend to recommend its use to the farmer and gardener as *the cheapest and best manure*, and we recommend it accordingly.

Those of us who have applied it to corn and potatoes think that it ripens those vegetables quicker than any other manure by several weeks.

Dated New Jersey, October, 1840.

Jacob D. Van Winkle.	*P. F. Welsh.*
John J. Newkirk.	*G. C. Van Riper.*
John Tise.	*George Tise.*
Daniel Van Riper.	*William Wood.*
George Demott.	*John Duryee.*
Henry Drayton.	*George Newkirk.*
Josiah Hornblower.	*Garret Newkirk.*
Corns. Van Winkle.	*Daniel Vreeland.*

Shares in the above company are $100 each, and may be had by applying to Anthony Dey No. 73 Cedar St. New York.—The owner will receive 20 per cent. per annum, payable in money, or 50 bushels of Poudrette. The price to those who buy Poudrette is 40 cents a bushel. It costs the Stockholders 12 cents a bushel. *One cents worth*, that is, 20 Gills, will manure 20 hills of corn, and the like quantity 15 hills of Potatoes.

Newspapers friendly to agriculture will confer a favor on the Farmers and Gardeners by publishing the above.

Dec. 22.

BONE MANURE.

The subscriber informs his friends and the public, that after ten years experience, he is fully convinced that ground bones form the most powerful stimulant that can be applied to the earth as a manure.

Orders for Bone Manure or Oyster Shell Lime, left at the Bone Mill, near Tremont road, in Roxbury, at the New England Agricultural Warehouse and Seed Store, No 52 North Market Street, or through the Post Office will meet with prompt attention.

March 4, 1840 NAHUM WARD

GRINDSTONES.

An extensive assortment of Water and Hand Grindstones constantly on hand and for sale by AMMI C. LOMBARD & CO. 13 Lewis's Wharf. 1s1y. Nov. 17.

TRACE CHAINS.

Just received, direct from the English manufacturesr 8 casks of Trace Chains, from 6 to 11 feet long, suitable for ploughing or draft chains. JOSEPH BRECK & CO.